PROPOSAL FOR TURBIDITY AND DYNAMIC MODELING INCORPORATING WQSAC COMMENTS OF 5/10//2004 MEETING

Amend Section Env-Ws 1703.11 (#7151, eff 12-10-99) Turbidity to read as follows:

Env-Ws 1703.11 Turbidity.

- (a) Class A waters shall contain no turbidity, unless naturally occurring.
- (b) Class B waters shall not exceed naturally occurring conditions by more than 10 NTUs.
- (c) No discharge shall cause turbidity to exceed background turbidity by more than 10 NTUs. Background turbidity means turbidity measured in the waterbody receiving the discharge at a location not influenced by the discharge.
- (c) Waters identified in RSA 485-A:8, III shall contain no turbidity of unreasonable kind or quality.



Amend Section Env-Ws 1705.02 effective 12-10-99 (Document #7151) <u>Low Flow Conditions</u> to read as follows:

Env-Ws 1705.02Low Flow Conditions Application of Criteria in Computations for Establishing Discharge Permit Limits

- (a) The flow used to calculate permit limits shall be as specified in (b) through (d) below.
- (a) The one hour average concentration for toxic substances shall not exceed acute aquatic life criteria more than once in every three years on the average. If data are not available to estimate the one hour average concentration, the one day average concentration may be used.
- (b) The four day average concentration for toxic substances shall not exceed chronic aquatic life criteria more than once in every three years on the average.
- (bc) For rivers and streams, the long-term harmonic mean flow, which is *the number of* daily flow measurements divided by the sum of the reciprocals of the daily flows, shall be used to develop *discharge* permit limits for all human health criteria for carcinogens.
- (ed) For tidal waters, the low flow condition *for computing discharge permit limits* shall be equivalent to the conditions that result in a dilution that is exceeded 99% of the time.
- (e) For each pollutant, modeling methods for establishing discharge permit limits that meet the requirements of (a) and (b) above may be either steady-state or time-dependent. A steady state modeling method is one in which model input parameters including flow and pollutant concentrations are assumed to be constant with time in the discharge and in the receiving water. A time-dependent modeling method is one in which model input parameters, including discharge flow, discharge pollutant concentrations, and receiving water flow and receiving water pollutant concentrations may vary with time.
- (df) For *steady state modeling of* rivers and streams, the 7Q10 flow shall be used to apply *chronic* aquatic life criteria and human health criteria for non-carcinogens.
- (g) For steady state modeling of rivers and streams, the 1Q10 flow shall be used to apply acute aquatic life criteria.